Docket No.: 10089/14

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

inventor:

T. KUROITA, et al.

Serial No.:

09/852,922

Filing Date:

May 10, 2001

For:

SIR:

MODIFIED THERMOSTABLE DNA

POLYMERASE

Assistant Commissioner for Patents Washington D.C. 20231

Art Unit: 1652

Examiner: Richard Hutson, Ph.D.

H 10 H.g.) 11/5/02

RECEIVED

OCT 2 8 2002

TECH CENTER 1600/2900

This is in response to the Restriction Requirement mailed September 25, 2002 setting a shortened statutory period for response. Accordingly, a response is due on or before October 25, 2002.

RESPONSE TO RESTRICTION REQUIREMENT

The Examiner requires election of one of the following allegedly patentably distinct inventions:

Group I:

Claims 1-12, 25-28 and 30, drawn to a modified thermostable DNA polymerase and kit comprising said polymerase, classified in class 435, subclass 194.

Group II:

Claims 13-21, drawn to a gene encoding a modified thermostable DNA polymerase, vectors, and host cells comprising said DNA polymerase and methods of expressing said gene, classified in class 435, subclass 194.

Group III:

Claims 22-24, drawn to a method for amplifying a nucleic acid comprising the use of a thermostable DNA polymerase classified in class 435, subclass 91.1.

Group IV:

Claim 29, drawn to a method of producing a mutated DNA comprising the use of a thermostable DNA polymerase, classified in class 435, subclass 440.

The Applicant elects with traverse, **Group I**, Claims 1-12, 25-28 and 30, drawn to a modified thermostable DNA polymerase and kit comprising said polymerase, classified in class 435, subclass 194, for prosecution in the present application.

(1) action: transferring fucose from guanosine diphosphate-fucose to a hydroxy group at 6-position of GluNAc closest to R of a receptor (GlcNAcβ1-2Manα1-6)-

 $(GlcNAc\beta1-2Man\ \alpha1-3)Man\beta1-4GlcNAc\beta1-4GlucNAc-R$ wherein R is an asparagine residue or a peptide chain carrying said residue, whereby to form

 $(GlcNAc\beta1-2Man\alpha1-6)-(GlcNAc\beta1-2Man\alpha1-3)\ Man\beta1-4GlcNAc\beta1-4-$

(Fuca1-6)GlucNAc-R

(2) optimum pH: about 7.0

(3) pH stability: retains activity after 5 hours of treatment at 4°C at a pH range of

4.0-10.0

(4) optimum temperature : about 30-37°C

(5) inhibition or activation: no requirement for divalent metal for expression of activity; no inhibition of activity in the presence of 5 mM EDTA

(6) molecular weight: about 60,000 by SDS-polyacrylamide gel electrophoresis; as the invention to be examined even though the restriction requirement is traversed.

It is not believed that extensions of time or fees for net addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 11-0600.

Respectfully submitted.

KENYON & KENYON

Date: Oct 25, 2002

Thomas A. Haag, Ph.D.

Reg. No. 47,621

1500 K Street, N.W. Washington, D.C. 20005 Telephone: (202) 220-4200

Facsimile: (202) 220-4201